

VERMONT PAYMENT FOR ECOSYSTEM SERVICES & SOIL HEALTH WORKING GROUP
PROGRAM OBJECTIVES, ELEMENTS AND ASSUMPTIONS

Caveats

- Precise terms, definitions and details will need to be developed later

Purpose

- Farmers are paid for producing ecosystem services

Ecosystem services to be Produced

1. Flood mitigation
2. Erosion reduction
3. Phosphorus and nitrogen retention
4. Carbon storage
5. Biodiversity

Focal Point

1. Focus on, but not exclusive to, soil health
2. Initial phasing focused on soil, field, and edge of field
3. Later phases focused on whole farm

Eligibility

1. All farmers¹ are eligible to participate in the program if they are in good standing with the Required Agricultural Practices (RAPs)
2. Disadvantaged farmers² have additional technical assistance to participate³
3. Farmers are paid a base fee to participate, at least in the first year (s), which in turn will require certain paperwork, data gathering and soil sampling

Program Phasing

1. The program will be phased in to allow for implementation in 2023 but able to grow in the services it pays for over time
2. The program will start as a one-year pilot/demonstration at the scale funding allows to move action forward soon, learn, and get payments into farmers' hands for producing ecosystem services
3. The pilot program will be administered by the AAFM because of its authorities and expertise and ability to get going sooner but the ultimate program administrator⁴ can be determined later and suggestions put forward now

¹ RAP definition? USDA definition? Other?

² USDA definition? Other?

³ Socially Disadvantaged Farmers and Ranchers (SDFR) could also be given a higher rank in proposal review

⁴ Note that data privacy is related to the funder's requirements not the administrator's

4. The PES WG will stay engaged throughout to support, monitor, and provide guidance of the pilot program including making final recommendations for a full-fledged program and its administration based on the pilot/demonstration and its lessons

Program Elements

1. The program will pay for ecosystem services, but may do so through evidence-based practices, modeling of outcomes enhanced by Vermont-specific data, and/or in-field measured outcomes
2. The program, over time, will address the whole farm but will begin with individual fields and edge of field within a farm chosen by the farmer
3. The program will use tiering that could involve: 1) enrollment and basic data collection and soil testing; 2) payments for widely supported evidence-based practices that produce ecosystem services; 3) payments for soil health and other measured outcomes with more extensive monitoring and sampling; 4) potential research or innovation tier (i.e., California program approach).
4. The program will incorporate a research element to support innovation, adaptive management and development of new practices and tools over time.
5. The program will integrate farmer learning networks and other collaborative tools for co-production of benefits and improvements to the program overall over time.
6. The program will utilize existing technical support avenues (SWCD) to support implementation and the farmers.
7. The program will seek to provide high return to the farmer and society by managing overhead and administrative costs, the number of tools to be used, the asks of farmers, and the extent of technical services required. Value must equal or exceed effort made by farmers.
8. To the greatest extent possible, the program will seek to use existing tools, data interoperability, and tools from existing programs for efficiency and ease of use.

Program Tools

1. A Vermont-tailored Cornell Comprehensive Assessment of Soil Health (CASH) test will be developed during Year One but a standard CASH test will be used in Year One as the Vermont-tailored one is developed.
2. Exact models to be used are to be determined but could include RSET, APEX, others, or some combination.
3. Models are preferred to be process-based to be more tailored and specific to Vermont.

Payments

1. Payments will be based on evidence-derived values that consider both society's willingness to pay (WTP) and farmer's willingness to accept (WTA)
2. The program will pay for: 1) practices that lead to quantifiable outcomes; 2) outcomes that are produced through various practices; 3) some combination of the two.
3. *Payments are for: 1) measured improvements in soil health from their farm's baseline (field, soil type, cropping type, etc.); 2) having a soil health score that is equal to or*

greater than a stated threshold (field, soil type, cropping type, etc.); 3) some combination (TBD); 4) how to account for payments for biodiversity and other potential non-soil health metrics?

Pilot Development Process

1. WG will develop program parameters and elements by 31 May 2022, based on the UVM work to date, case studies, suggested program designs offered to date to the WG, and discussions and dialogue among the WG.
2. AAFM plus small design team of PES WG members will work June-August 2022 to develop the program in detail based on the WG's parameters.
3. WG will be kept informed via at least bi-weekly email updates.
4. The PES WG may want to engage farmers in the program parameters and elements in early summer 2022, if possible, for comment and feedback.
5. The Design Team will report back to the PES WG in September 2022.
6. The PES WG will refine and hone final issues and questions with the Design Team.
7. The pilot program will then be finalized, and implementation will begin by 31 December 2022.